

U.S. Department of Transportation

Federal Aviation Administration

8110.xx

Initiated By: AIR-100

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SUBJ: DER DATA APPROVALS RELATED TO REPAIR AND ALTERATION OF FOREIGN REGISTERED AIRCRAFT

- **1.** <u>PURPOSE</u>. This order clarifies for Aircraft Certification Offices (ACOs) and Designated Engineering Representatives (DERs) when DERs are authorized to approve repair and alteration data intended for use on foreign-registered aircraft.
- **2.** <u>DISTRIBUTION</u>. Distribute this order to the branch level of Washington headquarters; to the branch level in the Aircraft Certification Directorates; to all Flight Standards District Offices; to all Aircraft Certification Offices (ACO); to the Aircraft Certification Branch at the FAA Academy; to the Brussels Aircraft Certification Division; and to all Flight Standards International Field Offices.
- **3.** <u>CURRENT POLICY IS INSUFFICIENT</u>. We at the FAA have determined that current policy does not fully address DER data approval for major repairs and major alterations for foreign-registered aircraft. We see a benefit in allowing DER data approval for major repairs and major alterations for foreign-registered aircraft in certain cases and will use this order to define those cases and the process for documenting the approvals.

4. FAA USE OF DERs.

- **a.** The FAA primarily uses DERs to support certification project work by ACOs. For certification projects, the ACO has discretion over the management of the project. This includes deciding when a DER can be used to approve data, when a prototype installation can occur outside the U.S., and when a foreign-registered aircraft can be used as a prototype or test article. The ACO is guided by policy in FAA Order 8110.4B, Type Certification (pertaining to type certification and supplemental type certification projects) and FAA Orders 8110.37, DER Guidance Handbook, and 8100.8, Designee Management Handbook that all pertain to authority and use of DERs. If the ACO determines that a foreign-registered aircraft can be used as a prototype, then the ACO can decide to accept DER-approved data on the project with concurrence from the civil aviation authority (CAA) of the State of Registry.
- **b.** We can also authorize a DER to make compliance findings to specific foreign regulations delegated to us by a CAA in accordance with a written FAA-approved arrangement. This authority can be used to approve changes to type designs by the FAA certification process. It would include approval

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of repairs or alterations identified in FAA approved service bulletins, or approval of repairs issued as revisions to the FAA approved structural repair manual.

- **c.** In addition to certification projects, the DER system also supports data approval for aircraft major repairs and major alterations. For U.S. registered aircraft, these repairs and alterations can be accomplished under Title 14, Code of Federal Regulations (CFR) part 43 using DER-approved data as FAA approved data. However, for foreign-registered aircraft, the CAA of the State of Registry is responsible for approving repair or alteration data. FAA order 8110.37C specifies that the DER must first be given specific authorization from the appointing ACO to approve major repair or major alteration data.
- **d.** Until now, there has been no specific guidance regarding DER-approved repair and alteration data intended for use on a foreign-registered aircraft. Current policy only addresses the notification procedures when a DER is working outside the U.S. on any aircraft. We have established criteria that define when DERs may approve data for foreign-registered aircraft, and provide that criteria in this order.
- **5.** WHEN DERS MAY APPROVE MAJOR REPAIR OR MAJOR ALTERATION DATA FOR USE ON FOREIGN-REGISTERED AIRCRAFT. DERs may make these approvals subject to the following criteria:
 - **a.** The DER must have the authority to approve data for major repairs and/or major alterations.
- **b.** The data must concern a U.S. State of Design aircraft, engine, propeller, or Supplemental Type Certificate unless it is for an aircraft operated by a U.S. operator under 14 CFR §§121.153(c) or 135.25(d). ("U.S. State of Design" means the FAA Type Certificate was not issued under 14 CFR§ 21.29)
 - **c.** The DER must use this disclaimer in the "purpose of data" block on the FAA Form 8110-3:

Compliance with the Federal Aviation regulations listed on this FAA Form 8110-3 is provided in support of a foreign-registered aircraft. Acceptance of these findings is at the discretion of the civil aviation authority of the State of Registry. The installer must determine compatibility of this data with the aircraft configuration.

- **NOTE 1:** DERs may approve major repair data applicable to Canadian-registered aircraft (of either U.S. or Canadian design) at U.S. or Canadian repair stations without using the above disclaimer. See FAA Notice 8110.88 for guidance on DER repair data approvals involving Canada.
- **NOTE 2:** DERs may approve major repair and major alteration data intended for use on foreign-registered aircraft operated by U.S. operators under 14 CFR parts 121 and 135 in the same manner that they approve data for U.S. registered aircraft on their certificate without using the above disclaimer.

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- **d.** The DER must identify the aircraft by serial number on the FAA Form 8110-3 per FAA Order 8110.37(611e).
- **6.** SPECIAL CONSIDERATIONS FOR AIRCRAFT REGISTERED IN JAA MEMBER COUNTRIES. Under Joint Aviation Requirements (JAR) 21, Subpart M, any minor change to type design requires the approval of the national CAA. Because the JAA does not authorize delegations to individuals, the data approval must be obtained either through the FAA certification process or by a JAA approved organization.
- **7.** PARTS AND COMPONENT ACTIVITY. We recognize that a DER who supports repair or alteration of parts and components, including engines and propellers not installed on an aircraft, can not always know where or when the parts and components will be installed. Therefore, the registry of the aircraft that they will be installed on may be unknown. As long as the DER is working within their authority when performing repair or alteration approvals on aircraft parts or components, the registry of the aircraft on which the part will eventually be installed is not a DER concern.
- **8.** <u>PLAN TO INCORPORATE</u>. This order will be incorporated into the next revision of the DER Guidance Handbook FAA order 8110.37 and the Designee Management Handbook FAA Order 8100.8. It will also be incorporated into future DER seminar presentations.
- **9.** <u>REQUEST FOR INFORMATION</u>. You can obtain additional information, or ask questions about this order, at the Aircraft Certification Service, Aircraft Engineering Division, Delegation and Airworthiness Programs Branch, AIR-140, telephone (405) 954-7074.

David Hempe Manager, Aircraft Engineering Division Aircraft Certification Service